

**Notice of Allowability****Application No.**

09/840,737

**Applicant(s)**

WHITE, DAVID J.

**Examiner**

Maikhanh Nguyen

**Art Unit**

2176

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERIT IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's arguments filed 05/28/08 and the telephonic interview on 08/15/08.
2. ☒ The allowed claim(s) is/are 8, 9, 12-48, and 74-96 (now renumbered as 1-62).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 8/15/08
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Doug Hutton/  
Supervisory Patent Examiner  
Technology Center 2100

**EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE**

**I. EXAMINER'S AMENDMENT:**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

Authorization for this examiner's amendment was given in a telephone interview with Kent Chambers (Reg. No. 38,839) on 08/15/2008.

**The application has been amended as follows:**

**In the Claims:**

**This listing of claims will replace all prior versions, and listings, of claims in the application:**

1.-7. (Canceled)

8. (Currently Amended) A method of generating customized versions of a document using a computer system, the method comprising:

storing the document in raw form;

parsing the document to create an internal representation of the document;

receiving a request to generate a second-level document;

decomposing the document to create the second-level document, wherein decomposing the document comprises:

applying a first first-level transform to the internal representation of the document to create a first first-level document; and

in response to the request to generate the second-level document, applying a second-level transform to the first first-level document to create the second-level document; [[and]]

decomposing the document to create a second first-level document, wherein decomposing the document to create the second first-level document comprises:

applying a second first-level transform to the internal representation of the document to create a second first-level document;

tracking changes to at least one of: (i) the raw form of the document, (ii) the first first-level transform, (iii) the second level transform, and (iv) the second first-level transform;

regenerating the document created using any of (i)-(iv) whose changes are tracked if a change occurs in any of (i)-(iv) whose changes are tracked; and

designating a previously stored version of the regenerated document invalid;

wherein the first first-level document and the second first-level document are different.

9. (Previously Presented) The method as defined in Claim 8, wherein applying a first first-level transform and applying a second-level transform comprises applying sequential transforms to the document.

10. -11. (Canceled)

12. (Previously Presented) The method as defined in Claim 8, wherein decomposing the document comprises applying a third-level transform to the second level document to create a third-level document.

13. (Previously Presented) The method as defined in Claim 8, wherein the document is stored in raw XML form.

14. (Previously Presented) The method as defined in Claim 13, wherein applying a first first-level transform and applying a second-level transform comprises applying sequential transforms to the document.

15. (Previously Presented) The method as defined in Claim 14, wherein applying a first first-level transform of the document stored in raw XML form comprises applying a subscription-level transform to the internal representation of the document to create a subscription-level document.

16. (Previously Presented) The method as defined in Claim 15, wherein the subscription-level transform enables content filtering of the internal representation in accordance with a user's request.

17. (Previously Presented) The method as defined in Claim 16, wherein applying a second-level transform comprises applying an organization-level transform to the subscription-level document to create an organization-level document.
18. (Previously Presented) The method as defined in Claim 17, wherein the organization-level transform enables subscription-specific content filtering of a subscription-level document.
19. (Previously Presented) The method as defined in Claim 18, wherein decomposing the document comprises applying a presentation-level transform to the organization-level document to create a presentation-level document.
20. (Previously Presented) The method as defined in Claim 19, wherein the presentation-level transform generates an organization-specific document for end user presentation.
21. (Previously Presented) The method as defined in Claim 20, wherein the presentation-level transform generates an HTML document or a text file for end user presentation.
22. (Previously Presented) The method as defined in Claim 21, wherein the subscription-level transform is mandatory and the organization-level and presentation-level transforms are optional.
23. (Previously Presented) The method as defined in Claim 8, wherein a transform is applied to a document only as a result of an initial demand for a transformed document.
24. (Previously Presented) The method as defined in Claim 23, wherein the demand for a transformed document is a client request.

25. (Previously Presented) The method as defined in Claim 24, wherein the demand for a transformed document is a document publication process.

26. (Previously Presented) The method as defined in Claim 23, wherein transformed documents are written to a cache.

27. (Previously Presented) The method as defined in Claim 26, wherein demands for a transformed document, subsequent to the initial demand, are referred to the cache.

28. (Currently Amended) A computer readable medium having code stored therein to cause a data processing system to generate a data document according to a process comprising:

- storing a raw form of the document;

- parsing the document to create an internal representation of the document; and

- receiving a request from a client computer system coupled to the data processing system to generate a second-level document into a particular form;

- decomposing the document into the form requested by the client system, wherein decomposing the document comprises;

  - applying a first first-level transform to the internal representation of the document to create a first first-level document; and

  - in response to the request to generate the second-level document, applying a second-level transform to the first first-level document to create the second-level document; [[and]]

- decomposing the document to create a second first-level document,

  - wherein decomposing the document to create the second first-level document comprises:

applying a second first-level transform to the internal representation of the document to create a second first-level document; tracking changes to at least one of: (i) the raw form of the document, (ii) the first first-level transform, (iii) the second level transform, and (iv) the second first-level transform; regenerating the document created using any of (i)-(iv) whose changes are tracked if a change occurs in any of (i)-(iv) whose changes are tracked; and designating a previously stored version of the regenerated document invalid; wherein the first first-level document and the second first-level document are different.

29. (Previously Presented) The computer readable medium as defined in Claim 28, wherein applying a first first-level transform and applying a second-level transform comprises applying sequential transforms to the document.

30. (Previously Presented) The computer readable medium as defined in Claim 28, wherein the document is stored in XML form.

31. (Previously Presented) The computer readable medium as defined in Claim 30, wherein the document stored in XML form is parsed by an XML parser to create the internal representation.

32. (Previously Presented) The computer readable medium as defined in Claim 31, wherein the internal representation level of the document is transformed to a subscription-level document by applying a subscription-level transform to the internal representation.

33. (Previously Presented) The computer readable medium as defined in Claim 32, wherein application of the subscription level transform to the internal representation to create a subscription-level document is required.

34. (Previously Presented) The computer readable medium as defined in Claim 32, wherein the subscription-level document is transformed into an organization-level document by applying an organization-level transform to the subscription-level document.

35. (Previously Presented) The computer readable medium as defined in Claim 34, wherein application of the organization-level transform to the subscription-level document to create an organization-level document is optional.

36. (Previously Presented) The computer readable medium as defined in Claim 34, wherein the internal representation of the document is decomposed to a transform-level document only in response to a request for a transform-level document.

37. (Previously Presented) The computer readable medium as defined in Claim 36, wherein transformed documents are written to a cache.

38. (Previously Presented) The computer readable medium as defined in Claim 37, wherein an initial request for a transformed document causes decomposition of the internal representation into the form requested and wherein subsequent requests for a transformed document causes the transformed document to be retrieved from memory.

39. (Currently Amended) The computer readable medium as defined in Claim 28, wherein the code is further configured to cause the data processing system to:



~~track changes to at least one of: (i) the raw form of the document, (ii) the first first-level transform, (iii) the second level transform, and (iv) the second first-level transform; and~~  
regenerate the transformed document the document created using any of (i)-(iv) whose changes are tracked when any of (i)-(iv) changes.

40. (Currently Amended) The computer readable medium as defined in Claim [[39]] 28, wherein the code is further configured to cause the data processing system to:

~~designate a cached version of the document invalid when any dependency related to the document changes, and~~  
regenerate the transformed document created using any of (i)-(iv) whose changes are tracked in response to a request for the document that is made after the ~~dependency~~ change occurs in any of (i)-(iv) whose changes are tracked.

41. (Previously Presented) The computer readable medium as defined in Claim 40, wherein the document is stored in XML form.

42. (Previously Presented) The computer readable medium as defined in Claim 39, wherein the document stored in XML form is parsed by an XML parser to create the internal representation.

43. (Previously Presented) The computer readable medium as defined in Claim 42, wherein the internal representation level of the document is transformed to a subscription-level document by applying a subscription-level transform to the internal representation.

44. (Previously Presented) The computer readable medium as defined in Claim 43, wherein application of the subscription level transformed to the internal representation to create a subscription-level document is required.

45. (Previously Presented) The computer readable medium as defined in Claim 43, wherein the subscription-level document is transformed into an organization-level document by applying an organization-level transform to the subscription-level document.

46. (Previously Presented) The computer readable medium as defined in Claim 45, wherein application of the organization-level transform to the subscription-level document to create an organization-level document is optional.

47. (Previously Presented) The computer readable medium as defined in Claim 45, wherein the internal representation of the document is decomposed to a transform-level document only in response to a request for a transform-level document.

48. (Previously Presented) The computer readable medium as defined in Claim 47, wherein transformed documents are written to a cache.

49.-73. (Canceled)

74. (Currently Amended) A system comprising:  
a processor; and  
a memory, coupled to the processor, having code stored therein to cause the system to generate a data document, wherein the code is executable by the processor for:  
storing a raw form of the document;

parsing the document to create an internal representation of the document; and  
receiving a request from a client computer system coupled to the data processing system to generate a second-level document into a particular form;  
decomposing the document into the form requested by the client system, wherein decomposing the document comprises:  
applying a first first-level transform to the internal representation of the document to create a first first-level document; and  
in response to the request to generate the second-level document, applying a second-level transform to the first first-level document to create the second-level document; [[and]]  
decomposing the document to create a second first-level document, wherein decomposing the document to create the second first-level document comprises:  
applying a second first-level transform to the internal representation of the document to create a second first-level document;  
tracking changes to at least one of: (i) the raw form of the document, (ii) the first first-level transform, (iii) the second level transform, and (iv) the second first-level transform;  
regenerating the document created using any of (i)-(iv) whose changes are tracked if a change occurs in any of (i)-(iv) whose changes are tracked; and  
designating a previously stored version of the regenerated document invalid;  
wherein the first first-level document and the second first-level document are different.

75. (Previously Presented) The system as defined in Claim 74, wherein applying a first first-level transform and applying a second-level transform comprises applying sequential transforms to the document.

76. (Previously Presented) The system as defined in Claim 74, wherein the document is stored in XML form.

77. (Previously Presented) The system as defined in Claim 76, wherein the document stored in XML form is parsed by an XML parser to create the internal representation.

78. (Previously Presented) The system as defined in Claim 77, wherein the internal representation level of the document is transformed to a subscription-level document by applying a subscription-level transform to the internal representation.

79. (Previously Presented) The system as defined in Claim 78, wherein application of the subscription level transform to the internal representation to create a subscription-level document is required.

80. (Previously Presented) The system as defined in Claim 78, wherein the subscription-level document is transformed into an organization-level document by applying an organization-level transform to the subscription-level document.

81. (Previously Presented) The system as defined in Claim 78, wherein application of the organization-level transform to the subscription-level document to create an organization-level document is optional.

82. (Previously Presented) The system as defined in Claim 80, wherein the internal representation of the document is decomposed to a transform-level document only in response to a request for a transform-level document.

83. (Previously Presented) The system as defined in Claim 82, wherein transformed documents are written to a cache.

84. (Previously Presented) The system as defined in Claim 83, wherein an initial request for a transformed document causes decomposition of the internal representation into the form requested and wherein subsequent requests for a transformed document causes the transformed document to be retrieved from memory.

85. (Currently Amended) The system as defined in Claim 74, wherein the code is further configured to cause the processor to:

~~track changes to at least one of: (i) the raw form of the document, (ii) the first first-level transform, (iii) the second level transform, and (iv) the second first-level transform; and~~  
regenerate ~~the transformed document~~ the document created using any of (i)-(iv) whose changes are tracked when any of (i)-(iv) changes.

86. (Currently Amended) The system as defined in Claim ~~[[85]]~~ 74, wherein the code is further configured to cause the processor to:

~~designate a cached version of the document invalid when any dependency related to the document changes, and~~  
regenerate the ~~transformed document~~ created using any of (i)-(iv) whose changes are tracked in response to a request for the document that is made after the ~~dependency change~~ occurs in any of (i)-(iv) whose changes are tracked.

87. (Previously Presented) The system as defined in Claim 86, wherein the document is stored in XML form.

88. (Previously Presented) The system as defined in Claim 85, wherein the document stored in XML form is parsed by an XML parser to create the internal representation.

89. (Previously Presented) The system as defined in Claim 88, wherein the internal representation level of the document is transformed to a subscription-level document by applying a subscription-level transform to the internal representation.

90. (Previously Presented) The system as defined in Claim 89, wherein application of the subscription level transformed to the internal representation to create a subscription-level document is required.

91. (Previously Presented) The system as defined in Claim 89, wherein the subscription-level document is transformed into an organization-level document by applying an organization-level transform to the subscription-level document.

92. (Previously Presented) The system as defined in Claim 91, wherein application of the organization-level transform to the subscription-level document to create an organization-level document is optional.

93. (Previously Presented) The system as defined in Claim 91, wherein the internal representation of the document is decomposed to a transform-level document only in response to a request for a transform-level document.

94. (Previously Presented) The system as defined in Claim 93, wherein transformed documents are written to a cache.

95. (New) The method as defined in Claim 8, wherein regenerating the document further comprises:

regenerating the document created using any of (i)-(iv) whose changes are tracked when any of (i)-(iv) changes.

96. (New) The method as defined in Claim 8, wherein regenerating the document further comprises:

regenerating the document created using any of (i)-(iv) whose changes are tracked in response to a request for the document that is made after the change occurs in any of (i)-(iv) whose changes are tracked.

## II. REASONS FOR ALLOWANCE:

Claims 8, 9, 12-48, and 74-96 are allowed.

The following is an examiner's statement of reasons for allowance:

Interpreting the claims in light of the specification, Examiner finds the claimed invention is patentably distinct from the prior art of record, as argued by Applicant in the Response dated 05/28/2008.

The closest prior art:

**Hyman et al.** (US 6772395) teaches storing a raw form of the document [See Col. 3, lines 20-36; Col. 6, lines 50-67]; parsing the document to create an internal representation of the document [See Col. 7, lines 35-Col. 8, line 13]; and

receiving a request from a client computer system coupled to the data processing system to generate a second-level document into a particular form [See Col. 9, lines 1-30].

The prior art does not expressly teach in combination all Applicant's claimed limitations. In particularly, **independent Claims 8, 28, and 74** recite the features: *"wherein decomposing the document comprises applying a first first-level transform to the internal representation of the document to create a first first-level document; and in response to the request to generate the second-level document, applying a second-level transform to the first first-level document to create the second-level document; decomposing the document to create a second first-level document, wherein decomposing the document to create the second first-level document comprises applying a second first-level transform to the internal representation of the document to create a second first-level document; tracking changes to at least one of: (i) the raw form of the document, (ii) the first first-level transform, (iii) the second level transform, and (iv) the second first-level transform; regenerating the document created using any of (i)-(iv) whose changes are tracked if a change occurs in any of (i)-(iv) whose changes are tracked; and designating a previously stored version of the regenerated document invalid."*



The Examiner asserts that the claims overcome the prior art of record when the limitations are read in combination with the respective claimed limitations in their entirety.

Dependent claims are allowed as they depend upon allowable independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Contact information**

- III. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272- 4093. The examiner can normally be reached on Monday - Friday from 9:00am – 30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Maikhanh Nguyen/  
Examiner, Art Unit 2176

*/Doug Hutton/*  
Doug Hutton  
Supervisory Primary Examiner  
Technology Center 2100